



ENGINEER UPDATE

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US Army Corps of Engineers
BUILDING STRONG®

Europe District begins \$300M school projects

*By Rachel Goodspeed
Europe District*

A surge in Department of Defense school projects in Europe will bring almost \$300 million in renovations and construction during the next four years, up from \$15 million in fiscal 2009.

Major projects that Europe District will oversee for the Department of Defense Dependent Schools-Europe (DoDDS-E) include a new high school in Kaiserslautern; new elementary and high schools at Böblingen; and new elementary, middle and high schools at SHAPE (the Supreme Headquarters of Allied Powers in Europe) near Mons, Belgium.

In addition to SHAPE's new facilities, discussions between the district and NATO representatives are underway for additional classrooms in the new high school to house portions of the SHAPE International School.

The huge increase stems from the old buildings where many of the schools are housed, according to Jose Tovar, DoDDS-E Facilities Branch chief. Many of the buildings have aging infrastructure that is operating beyond their normal life.

"A prioritized plan is being developed that would replace many of these old schools that are functionally inadequate, as well as having building systems in poor condition," he said. "Replacing these old schools will result in new facilities that will meet the current educational facilities specifications, and give our students better learning environments."

Wiesbaden. In Wiesbaden, a \$5 million multipurpose room that will provide a new stage and full-service kitchen for the elementary and middle schools is under construction and scheduled to be complete in 2010.

Meanwhile, the high school is getting an overhaul that will furnish students with new labs, a music room, JROTC (junior ROTC) area, and cosmetology and culinary arts classrooms. The projects are expected to finish in 2012, and will cost about \$15 million.

Kaiserslautern. The Kaiserslautern military community will see a much bigger transformation. A \$74 million high school, scheduled to begin construction in 2011, will provide students with a wide variety of new



Europe District Photo

The elementary and middle school in Landstuhl, Germany, have gained a \$7.5 million addition.

educational programs, according to Kelley Grant, the district's project manager.

"In addition to new classroom and administrative space, the project gives the school a new auditorium, a music suite dedicated for band and choral, several new technology and chemistry labs, a dedicated JROTC area, a culinary arts room, and even a TV production and editing lab," she said.

Grant added that the Vogelweh community hopes to attract more student activities and competitions with a \$19.3 million combined stadium and multipurpose room that is expected to have the capacity to hold Europe-wide events.

Böblingen. The heavily wooded Böblingen Training Area near Stuttgart will see a new elementary school to house 540 students, and a high school to house about 620 students.

"Right now, the elementary school is housed in buildings that were originally German army barracks in the 1930s," said Steve Umbrell, the district's project manager. "As for the high school, because there is no sports field and inadequate classroom space, the students have to compete for space with the military."

England. Outside of Germany, the U.S. Army Corps of Engineers has two other large projects in the works. Near Harrogate in

North Yorkshire, England, Army planners conducted a feasibility study with DoDDS-E officials to upgrade school facilities for the Menwith Hill Royal Air Force Station. The schoolhouse houses 272 students and expects to enroll about 360 in the future as new housing projects are built, according to Phil Cohen, the district's Planning Section chief.

The study included options ranging from renovating the current facilities to building new facilities in an undeveloped area. The cost would range from \$45 million to \$54 million.

SHAPE. At SHAPE, blueprints are being worked for elementary, middle and high school projects that could total more than \$100 million. Their proximity to the SHAPE International School, which is planning about \$40 million in upgrades, have brought discussions on how to integrate elements of the international school upgrades into the project.

Roughly 2,200 students from 38 nations attend the existing SHAPE International School, according to the school's Web site. So far, countries that have expressed interest in funding this venture include Canada, England, Germany and Belgium.

"We're working with DoDDS and the whole international team to ensure everyone gets what they need, and at the best value for their money," Umbrell said.

BUILDING STRONG®

Insights

Respect vital to all cultures

By Col. Hanson Boney
Chaplain, U.S. Army Corps of Engineers

(This is the latest in a series of articles about Army Values.)

Respect is an important part of establishing relationships and long-term institutions. Mutual respect in a society ensures political and social continuity, and allows a measure of uniformity.

Respect also promotes longevity. One reason why some societies and cultures are especially volatile is due the inability of their social, political and geographical entities to affirm diversity. When a group is respected and valued, their investment in the culture will yield tremendous dividends.

About 500 years ago, a group of Native American nations called the Iroquois (Haudenosaunee or "People of the Longhouse") recognized the value of establishing a society based on mutual respect and the integrated involvement of its constituency.

Before 1450, the Iroquois (Seneca, Cayuga, Onondaga, Oneida and Mohawk tribes) were plagued by constant warfare that decimated their population and diminished their food supply. According to Iroquois spiritual tradition, the Great Spirit commissioned two prophets, Deganawida and Hiawatha, to bring the message of peace to the five nations.

This message was known as the Great Law of Peace. The law contained the principles for unity among individuals and

nations. Under the Great Law of Peace, the tribes formed the Iroquois League.

Peace brought prosperity and improved the quality of life for the Iroquois people as agriculture flourished and trade increased. Peace protected women and children who were responsible for gathering fruits and vegetables. During the Great Law of Peace, men hunted wild game and fished the waterways without conflict. So the Iroquois thrived even in the harsh winters of what is today New York.

The Iroquois often adopted other native people into their society and were not averse to using ideas from other cultures. By 1668, two-thirds of the Oneida village was Algonquians and Hurons. In 1720, a sixth nation, the Tuscarora, was added to the league. The Tuscarora increased the influence of the Iroquois down through the Allegheny region.

The Great Law of Peace was reinforced by the full participation of the people. Under the law, men and women decided the central issues of the day. The Sachems (chiefs), consulted the Council of Mothers on every issue from signing treaties to declaring war. Even though they met separately, women could appear at the Grand Council of men to speak on important issues, and often initiated legislation.

Deganawida and Hiawatha warned the league members that a return to the old rivalries would lead to destruction and loss of their homeland, so for almost 200 years the Iroquois League enjoyed peace and prosperity.

But European colonization caused the demise of the league. As the individual nations chose sides in the fight for colonial expansion, internal strife again dominated the Iroquois. The end of the American Revolution brought dramatic changes to the Iroquois way of life. With a diminished population and American claims on the land, the six nations were stripped of their property, their crops burned and their people starved to reduce the threat to American settlement.

The Iroquois prophets knew that no nation, culture or institution can endure without respect for individuals. We often hear people argue about rights in our country, but who we are extends far beyond rights. The Iroquois during the Great Law of Peace recognized the importance of responsibility, commitment to the greater good, and the importance of diversity.

These ideas are as important today as they were to the Iroquois League. The Army has even made "Respect" one of the seven Army Values because, like the members of the Iroquois League, our Soldiers come from all corners of the nation, from every race and every conceivable philosophy or religion. Respect for other people and other beliefs helps weld our Army into an effective fighting force.

(The opinions expressed in this article are those of the writer and do not reflect the official policy or position of the U.S. Army Corps of Engineers, the Department of the Army, the Department of Defense, or the U.S. government.)

Officers from People's Liberation Army visit U.S. Army engineers

By Bernard Tate
Headquarters

Six senior officers with the People's Liberation Army (PLA) of the People's Republic of China visited USACE Headquarters, Fort Belvoir, Va., and Fort Leonard Wood, Mo., Nov. 30-Dec. 4. This is only the second time that PLA officers have visited the U.S. Army Corps of Engineers.

The delegation wanted to meet U.S. Army engineer leadership, discuss roles in disaster response and visit operating engineer units. During their visit at Headquarters the delegation received several briefings including USACE 101, flood control and coastal emergencies missions and functions, the Corps' roles in Emergency Support Functions 3 (Public Works & Engineering) and 9 (Urban Search & Rescue), the Civil Military Emergency Preparedness Program, and the National Response Framework briefing presented by a representative of the Federal



Photo by F.T. Eyre, ACE-IT

Lt. Gen. Robert Van Antwerp, chief of engineers, talks with an officer from the People's Liberation Army during a briefing at USACE Headquarters.

Emergency Management Agency.

At Fort Belvoir, the delegation received briefings on the 911th Urban Search and

Rescue and the 249th Engineer Battalion (Prime Power), reviewed a 249th static rescue display and toured the new hospital con-

struction project.

At Fort Leonard Wood, the delegation received briefings on the Army Engineer School, ARNORTH's role in supporting civilian authorities, and the 35th Engineer Brigade's disaster response mission. The delegation also spent time on construction simulators used by the Engineer School.

Their visit stemmed from a counterpart visit made by Gen. George Casey, Jr., Chief of Staff of the Army, to the People's Republic of China Aug. 19-23. Casey and his PLA counterpart agreed on a planned program of exchanges. USACE has been tasked to develop and lead the engineer functional exchange with the PLA.

The delegation included Maj. Gen. Yang Xuming, deputy director of the Military Training and Arms Department; Senior Col. Shi Zhongwu, commandant of the Engineer Command Academy; and Senior Col. Xu Zhimin, deputy bureau director, Military Training and Arms Department.

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Wreaths Across America

Corps employees take part in national holiday event

About 25 employees, family and friends from the U.S. Army Corps of Engineers joined 6,000 volunteers Dec. 12 to help place 16,000 balsam fir wreaths with red bows on graves at Arlington National Cemetery.

This was the first year that Lt. Col. Kirk Gibbs, the secretary of the general staff in Headquarters, and his family had taken part in the Arlington Wreath Project.

"It's something we wanted to do with our kids," Gibbs said. "We wanted them to understand what Arlington National Cemetery means, and why it is important to honor the veterans buried there."

"The section of the cemetery where we laid our wreaths was World War II veterans. It was a somber experience, but it felt like we were honoring those who fought in that war," Gibbs said. "It was a cold morning, and those Soldiers fought in some terribly cold weather, especially during the Battle of the Bulge. So it felt like we were honoring their experience and their sacrifice."

Morrill Worcester, president of the Worcester Wreath Company in Harrington, Maine, started the tradition in 1992 when his company had 5,000 surplus wreaths near the end of the Christmas season. He made arrangements to place the wreaths on graves at Arlington National Cemetery.

"The first 13 or 14 years of the Arlington Wreath Project, I just did it because I wanted to and it was kind of a private thing," Worcester said. "We didn't want any publicity...We just did it."

For more than a decade, Worcester sponsored the Arlington Wreath Project and the effort remained small and anonymous until 2005 when an Air Force photographer captured an image of the snow-covered cemetery with the wreaths decorating the graves.



Photo by R.C. Groves III, Middle East District

Col. Ron Light, commander of Middle East District, and Cadet Airman Isaac Baumhoefener lay a wreath at Winchester National Cemetery in Winchester, Va.

"Things just totally changed," Worcester said.

After the photo hit the Internet, the tradition grew exponentially. This year 151,000 wreaths were placed in more than 400 cemeteries across the country by 60,000 volunteers as part of Wreaths Across America Day. Individuals and companies sponsored all but 25,000 of the 151,000 wreaths.

"I love seeing the participation," Worcester said. "I'm very proud that I started it, but it's certainly not just me anymore."

USACE personnel across the country took part in Wreaths Across America. For example, Col. Ron Light, commander of Middle East District, helped Isaac Baumhoefener, a Civil Air Patrol cadet, place a wreath at the grave of World War I



Photo by F.T. Eyre, ACE-IT

Lt. Col. Martha Kiene, chief of the Headquarters USACE Operations Center, lays a wreath at Arlington National Cemetery in Washington, D.C.

veteran Pvt. Charles Fletcher in Winchester National Cemetery. About 90 wreaths were placed on graves in the cemetery in Winchester, Va.

"I think of it as a unique opportunity we that have, being so close to Arlington National Cemetery, and a very special, unique way to honor our fallen veterans," said Lt. Col. Martha Kiene, chief of the USACE Operations Center. This was the second year that Kiene and her family participated in the Arlington Wreath Project. "It's a significant emotional event to feel connected to those who have served before us. You feel loss, you feel very proud and also very sad."

(Samantha Quigley of the American Forces Press Service, Bernard Tate of Headquarters, and Julie Shoemaker of Middle East District contributed to this article.)

Top audits now business as usual

By Bernard Tate
Headquarters

When the Chicago Bulls and the L.A. Lakers won the NBA championship for the second time, the fans called it a "repeat." When the teams won it a third time, the fans were chanting "Three-peat...three-peat...three-peat!"

The U.S. Army Corps of Engineers scored a repeat of its own Nov. 24 when our civil works finances received a clean bill of health for the second year in a row. But instead of calling for a "three-peat" in 2010, USACE financial managers will simply call it "business as usual."

The technical term is an "unqualified opinion." That means the Corps' civil works finances were audited by KPMG, a contracted independent accounting firm, and passed the audit with no qualifiers...no ifs, buts, or maybes.

"I'm always happy to share news that confirms we are on our way from good to great," said Lt. Gen. Robert Van Antwerp, chief of engineers, in an e-mail message to all USACE employees. "Please join me in a big round of applause for our finance and accounting teams. Just in time for Thanksgiving, they wrapped up the long and sometimes grueling process of the annual audit -- the Department of Defense Office of Inspector General issued an 'unqualified opinion' for the second year in a row."

"Last year, we became the largest federal agency (in terms of property) and the first major DoD organization to receive this clean bill of financial health," Van Antwerp continued. "To repeat this year is outstanding. During fiscal 2009 we accounted for more than \$10.8 billion in civil works transactions, a 42 percent increase from fiscal 2008, making the

accomplishment even more impressive. I thank the entire resource management team for their hard work, and congratulate them for this achievement."

But just because the RM team scored a repeat this year doesn't mean that it was easy.

"This year we transitioned from PriceWaterhouseCoopers to KPMG, so that brought a lot of challenges," said William Holtzmann, team leader for civil works accounting policy in Headquarters. "We had to almost go back to the first-year mentality that we had with PWC in 2006. It took a lot of education to bring the auditors up to speed with the USACE business processes, and go through the audit process with them."

All audits require a data call from the field, and this year required 10,000 samples. A "sample" is a single financial transaction and could be anything from one paycheck for one employee to a new engine for a dredge. To put it into perspective, the first audit with PriceWaterhouseCoopers in 2006 required 14,000 samples, 2007 had 6,000, and to earn the Corps' first unqualified opinion audit last year PWC needed just 4,000.

"But with the transition from PWC to KPMG, we watched back up to 10,000 samples," Holtzmann said. "So this year was a challenge with A) more samples, and B) training new auditors on the USACE business processes. Next year we hope to start reducing our samples again and make it lot easier for the field."

Although the USACE financial community is pleased with their second consecutive top-grade audit, they actually see it as just the beginning.

"It's not unusual for a federal agency to get it two years in

a row. Once you get there you're supposed to keep it," said Michael Walsh, chief of Finance and Accounting in Headquarters. "The auditors are auditing our financial statements, and if we get an unqualified opinion it means our statements are fairly presented. So once you can produce good financial statements, it is expected that you will maintain that level. So we expect to keep our unqualified opinion forever."

"We are still the first major DoD organization to get one," Holtzmann added. "The rest of the DoD folks are still trying to get to audit readiness. But if you go to other federal agencies like the Department of Labor or Department of Education, they have maintained their unqualified opinion for years. Once you get one, you should just continue to improve your internal controls."

According to Walsh and Holtzmann, a lot of people deserve credit for the Corps' second unqualified opinion audit and the future it promises.

"The USACE Finance Center in Millington, Tenn., was exceptional in supporting the year-end financial statement preparation," said Wesley Miller, director of Resource Management. "Having our own Finance Center and financial system were keys to success."

"The districts also deserve a lot of credit," Walsh said. "They had to answer almost 250 percent more samples than they did last year, from 4,000 to 10,000."

"Plus all the questions," Holtzmann said. "Once again, with new auditors, it seemed like every sample had a question or a review. So the districts had to not only send in the proper documentation for each sample, but also answer the questions that came back. So it was a monumental effort by those guys."

Mobile District returns dredge bell to home

By Lance Davis
Mobile District

Mobile District continued a centuries-old maritime tradition as it returned a ship's bell to Rock Island District. How did a ship's bell from Rock Island District come into Mobile District's possession? And why does Rock Island District own a ship's bell in the first place? The answers go back to the early 20th century.

In 1937, Rock Island District's dredge *Rock Island* was commissioned to support maintenance dredging on the upper Mississippi River. In 1958, the dredge *William A. Thompson* replaced the *Rock Island*.

The *Rock Island* transferred in 1963 to Mobile District, where it was renamed the dredge *Collins*. The *Collins* served as a maintenance dredge on the Black Warrior, Alabama, and Tombigbee rivers until she was decommissioned and used for parts in 1978 after 41 years of service.

The dredge's bell was removed and preserved in the Black Warrior-Tombigbee-Alabama-Coosa Project Office in Tuscaloosa, Ala.

A ship's bell is a powerful symbol of the vessel's soul. Throughout history, ships' bells have been used for time-

keeping, safety communication, shift changes, and alarms. Today, maritime law requires all vessels to carry a bell, according to the Naval Historical Center.

"The time has come to return the *Rock Island* bell to its proper home in Rock Island District," said Col. Byron Jorns, Mobile District commander, during the transfer ceremony, which took place during South Atlantic Division's Operations Managers Regional Conference in Point Clear, Ala.

Jorns said that passing of the bell symbolizes the brotherhood within the U.S. Army Corps of Engineers' operations community.

"There is a reason the *USS Alabama* is berthed in Mobile Bay right now," Jorns said. "Because it belongs there. And there's a reason the *Rock Island* bell is being returned to Rock Island District. Because it belongs there."

The ceremony continued as Wynne Fuller, operations division chief of Mobile District, passed the bell to Steve Russell, operations division chief of Rock Island District. Fuller rang the bell once signifying its transfer from Mobile District, followed by Russell ringing the bell once to accept it into Rock Island District.

"The bell represents the people of Rock Island and Mo-



Photo by Adrien Lamarre, Mobile District

Wynne Fuller, operations chief of Mobile District, rings the bell of the dredge *Rock Island* to symbolize the bell's passing from Mobile District to Rock Island District. At left is Steve Russell, operations chief of Rock Island District. Danny Hensley, center, is an operations manager for Mobile District

bile districts who worked on the dredge *Rock Island* and the dredge *Collins*, but I think it's appropriate that the bell is returned to its origin," said Danny Hensley, operations manager at the Black Warrior-Tombigbee-Alabama-Coosa Project Office.

The *Rock Island* bell will be displayed in a place of honor in Rock Island District's Mississippi River Project Office in Pleasant Valley, Iowa. Russell said the office was chosen because if the dredge *Rock Island* were still in service, that would be her home port.

Army a leader in environmental work

By John Neville
Louisville District

Today, the U.S. Army leads the way in environmental stewardship, but some say that hasn't always been the case, often citing toxic chemicals found decades later at formerly used defense sites (FUDS).

In 1997, the Ohio Environmental Protection Agency and Ohio Department of Health conducted an environmental site assessment of the River Valley middle and high school campuses due to concerns raised about the number of leukemia cases among school graduates.

They found that the school sat on the site of the former Marion Engineer Depot that opened during World War II and operated for 15 years. Analysis found two potentially hazardous situations.

The first was a radium-painted, dime-sized aluminum disk buried in front of the high school. The Army used these disks to mark bridges and vehicles so that troops could see them at night. The disk was removed, and the soil did not test positive for radioactivity.

The second situation was more serious. Further analysis of the grounds uncovered a former waste disposal area where the Army burned fuels and solvents. The depot was one of the largest in the Army and home to thousands of vehicles and other engineering equipment.

So, there were a lot of parts. To prevent parts from rusting while they were stored, manufacturers coated much of the equipment in cosmoline. When time came to use the parts, the Army dipped them in vats of trichloroethylene to remove the cosmoline. Eventually, the leftover chemical residue in the vats was taken to trenches and burned.

The trenches, found when Louisville District personnel interviewed people who had worked at the depot, were underneath the schools' athletic fields.

Disposal practices were not as restrictive as they are today because the scientific and medical communities did not know the danger of some of the chemicals used by the De-

partment of Defense, according to Dr. David Brancato, a subject matter expert and risk assessor in Louisville District's Environmental Division.

Since there were no known health threats, there were no laws regulating the use of these chemicals. But scientific and medical research began uncovering the harmful effects of many substances used by DoD and commercial industries, so Congress began passing laws regulating their use.

In 1976, Congress passed the Resource Conservation and Recovery Act (RCRA) that regulated any person or facility engaged in the creation, transportation, treatment, and disposal of hazardous waste.

But RCRA did not address the necessary cleanup at contaminated sites. So in 1980, Congress enacted the Comprehensive Environmental Response Compensation and Liability Act (CERCLA), also called Superfund.

"Superfund established a mechanism of response for cleanup of hazardous waste from accidental spills, and from the chronic environmental damage from abandoned hazardous waste disposal sites," Brancato said.

The district's Environmental Division took the lead on the environmental investigation at Marion in March 1998. The division's staff specializes in engineering, chemistry, risk assessing, geology and other disciplines. At Marion, the goal was to figure out if anything on the property presented a risk to the community. If so, then the Corps' job was to contain it or clean it up.

USACE investigators found the trenches by talking to Soldiers and civilians who worked at the depot more than half a century ago.

"Based on the interviews, we found where the trenching had occurred," Brancato said. "It was a common activity in the past. Without regulations, if they had no use for material, if it was waste, then it was buried."

Upon further study, USACE found contaminants in the subsoil through sampling, but the Ohio EPA and Ohio Department of Health determined that the school could still function, because there was no definitive association be-

tween graduates of River Valley with leukemia and their attendance at the school. The study was based on years of air and groundwater monitoring by USACE.

But public opinion was set against local agencies and USACE. Contentious town hall meetings, a leukemia rate among graduates higher than the national average, and the news media persuaded officials that the school should close.

"Science and politics were at odds at that point," Brancato said. "They didn't necessarily believe the reports."

Once the school closed, USACE cleaned up the site so the city could sell the property and use it for other purposes. Thousands of tons of dirt were removed, and a cap was placed around the trenching area and sealed. The seal ensures that the remaining soil is not disturbed by water infiltration.

USACE continues to inspect the cap annually, and the most recent inspection shows that it is working as designed.

The Marion School District sold the site to local businessman Ted Graham, who is having it rezoned for industrial use, in accordance with the deed restriction. The property can not be used for school or residential purposes. Graham said he is confident in the integrity and safety of the land.

"The government came in and cleaned it up by the book," he said. "I haven't heard any complaints from the community except for one or two dissidents, and you'll never make them happy. My workers are confident they cleaned up the place, and they feel safe working there."

The American way of life depended on Allied victory in World War II. The Army's standard operating procedures at that time could not account for the toxicology of certain chemicals or how they were disposed of. The Soldier who dug the trench or set flame to it had no reason to believe he was creating a situation that could harm Americans more than half a century later.

"Now we have the National Cancer Institute and the International Agency for the Research of Cancer," Brancato said. "There was activity on installations that would not meet today's standards based on RCRA and CERCLA. That knowledge is changing the way we do business."

Grass-roots charity effort assists Afghan community

By Mark Willis
Afghanistan Engineer District North

It all began with a package of chewing gum.

About once a week, whenever Gloristine Price, Master Sgt. Elvis Williams, Terry and Carol Steuart, or I make the short walk from Afghanistan Engineer District's Qalaa House to nearby Camp Eggers, it almost always happens: Afghan children will suddenly appear at our side, seemingly out of nowhere, asking us to buy a pack of chewing gum. At other times, they'll tag along offering a hand-made bracelet or maybe a tattered tourist magazine in exchange for a dollar.

Naturally, the sales pitch always works and we readily part with our spare dollars, but later on we wonder about the experience. Why are these children, many as young as six or seven years old, not out playing with little friends and having a normal childhood, instead of approaching strangers on the street trying to earn a little extra money to help support the family?

It didn't take long for us to learn the answer – life can be harsh in Afghanistan, and children grow up quickly in the world's second-poorest country.

Their meager circumstances were brought to our attention again when other AED employees and I drove through the remote villages of Mir Bacha Kot and Gul Dura en route to USACE construction sites. As we made our way along the dirt roads of the villages, I would see little children standing by the road as we drove by, holding out the palm of one hand and making a circular motion over it with the fingers of the other.

When I asked my interpreter what this gesture meant, he said that in the past some U.S. Army Corps of Engineers workers had donated a box of pencils and writing tablets to the village, and the children were making a writing motion, hoping we had brought more paper and pencils.

The interpreter explained that most of these remote schools do not have the budget to supply paper and pencils for the children, and those were also things that many village families cannot afford.

The more we thought about it, the more it bothered us --

the Kabul street kids with their packages of chewing gum or ragged magazines, desperately trying to help their families, and the village children sitting in classrooms with no writing paper on their desks.

During phone calls back home, we often told family members and co-workers in the U.S. about the plight of the Afghan children, and it wasn't long before something unexpected and very special happened ... *boxes began arriving.*

The first to arrive were two boxes of notepaper and pencils sent to Ben Neely, resident engineer, from a friend in the U.S. The supplies, enough for two classrooms, were soon delivered to the Gul Dura girl's school, and were received with looks of wonder and amazement.

Not long after that, my wife and sister-in-law sent boxes filled with Dum-Dum suckers and individually-wrapped peppermint candy for the Afghan street children.

But that wasn't the end; more boxes were coming. During a phone conversation with a co-worker back in Wilmington District, Gloristine Price, administrative assistant for the Kabul Area Office, mentioned the kids' school needs, and how excited the Afghan children were to receive candy or any other item.

After hearing this, the co-worker, Gloria Cliff, went into action. She and several other people from Wilmington District donated a number of big boxes filled with pens, paper, pencils, coloring books, snacks, and other items for the children of Afghanistan.

Price's cousin, Gwen Mustaf, mailed a large box of school supplies and snacks for the children. Helping kids and their families is something she and her husband, Shaar Mustaf, do year-round in the U.S., since they manage the Take Charge Program in Maryland. This program, founded by Gwen, specializes in family strengthening and intervention for at-risk youth.

At about this same time, Master Sgt. Elvis Williams called his wife, who sent a large box of toothbrushes and toothpaste. These items, along with coloring books, crayons, and notepaper, were included in gift bags put together by the Kabul Area Office staff for the young children of some of AED's Afghan workers.

About a week later, Kabul North staff member Staff Sgt. Dominic Worthy decided to take part. We completed a second visit to one of the outlying village schools to drop off more boxes of school supplies, and we learned that 450 children attend the school in morning and afternoon shifts.

Even though the supplies we delivered would benefit several classrooms, we realized that most of the students attending this remote village school would still be without school supplies of any kind.

After returning to his room, Worthy began making phone calls to get prices on reams of notepaper, planning to buy more school supplies with his own money if necessary. Then an idea occurred to him, and he made another call, and another.

The next day he received almost unbelievable news -- a staff member from the Office Depot Foundation (the charity arm of Office Depot) confirmed that their corporation will donate 450 children's backpacks filled with notepaper, pencils and other school supplies to be distributed to each of the children of the impoverished village school.

To make this happen, Worthy is paying for the shipment of all these backpacks and school supplies to Afghanistan out of his own pocket. No longer would those children walk to and from school empty-handed. Now they will have school supplies, and something to carry them in. The backpacks are due to arrive in a few weeks.

This steadily-growing humanitarian campaign all began with those first few packages of chewing gum the street children held out, trying to help their families. This small act brought attention to the Afghan children's true needs, and people responded. USACE workers, Soldiers, friends and families back in the U.S. reached out. As a result of their compassion, desperately needed school supplies made the journey from America to Afghanistan, and into the hands of Kabul street kids and the children of remote villages.

In just a couple of months, this grass-roots effort had grown, spreading from family to family back home, and eventually culminating in the donation by the Office Depot Foundation that will bring smiles to young faces throughout an Afghan community.



Photo by Master Sgt. Elvis Williams, AED North

Gloristine Price enjoys a moment with several Afghanistan children who have received gift bags of note paper, pencils, coloring books, and snacks.



Photo by Samir Rahimi, AED North

Staff Sgt. Dominic Worthy (left) and Mark Willis, construction representative, during a delivery of school supplies to the remote Gul Dura Girl's School.



During the live-fire exercise, Aegis Defence Services personnel tell Col. Jeffrey Knippel to get down, surround him with a protective cordon, then hustle him out of the danger area. Knippel is the commander of Gulf Region South District.

Security top priority for Gulf Region

Article and Photos
By Alicia Embry
Gulf Region South District

Security is a top priority for the U.S. Army Corps of Engineers in Iraq, and especially when our civilians and Soldiers go “outside-the-wire.” The security personnel are provided by Aegis Defence Services and they are trained what to do in an emergency. But what about their clients? What do the clients do if there is trouble?

Aegis personnel provide a two-hour course to teach their clients what to expect during an emergency. The training is voluntary for Aegis clients, but *not* for employees of Gulf Region South District. Col. Jeffrey Knippel, district commander, wants his people to be safe during an emergency, and has made the training *mandatory*.

Seven district employees took the training at Tallil Airbase Nov. 6, and three employees trained at Basra Airbase Dec 1. Aegis personnel showed them how to use the medical and communications equipment that their teams carry, and the training included a realistic live-fire scenario.

“I wanted my people to experience the techniques, tactics and procedures (TTP) used by Aegis during enemy contact, and to know what will be expected of them,” Knippel said. “This is important, because it has been shown that realistic training increases one’s chances of surviving a real situation.

“I like the fact that the training brings to the surface things that you don’t think about when the TTPs are briefed to you,” Knippel added. “Specifically, the physical requirements, the increased confusion with the contact, and the sequence of events. Also, the hands-on training with the



Aegis security personnel familiarize Gulf Region South District personnel with radio and first aid procedures.

communication and medical equipment gives us confidence that we would be able to use them if we had to.”

Others who took the training also had high praise.

“Everyone should take this training whether they go outside the wire or not,” said Toni Graves, construction representative. “You never know.”



“I’ve told my friends about the training, and I’d like to tell the Aegis team ‘Job well done! Thank you,’” said Capt. Christine Wolfe, S2 intelligence officer.

(Bernard Tate of Headquarters also contributed to this article.)

HR Corner

Learning center needs instructors

By Jeffrey Dziedzic
USACE Learning Center

Today’s workload sometimes makes it difficult to make the human capital investments in our personnel that are required to build a workforce that can meet the demands of the Army and the nation. Training and educational activities are critical investments required to ensure that our team members are prepared to meet those demands.

The **USACE Learning Center (ULC)** is engaged in annual resident and distance education for about one third of the USACE workforce. During fiscal 2009, more than 11,280 students graduated from the Proponent Sponsored Engineer Corps Training (PROSPECT) program, and the forecast for this fiscal year is even higher.

The ULC offers an array of subjects including new courses such as Early Contractor Involvement and Sustainability, and Leadership in Environmental and Energy Design.

In addition, much of the ULC curriculum helps maintain professional certifications by awarding continuing education credits or professional development units.

ULC officials would like for USACE employees to consider becoming a PROSPECT course instructor. Currently, there aren’t enough adjunct PROSPECT instructors to meet all of the training requests. The subject of the most need are installation support, real estate, environmental law, construction management (design build and construction contractor administration), civil engineering (specifications writing), structural (masonry), and electrical (all electrical courses).

Don’t have the time to add PROSPECT instructor to your workload? By taking time now you will be making a positive investment in our current and future workforce. We need individuals with the right skills to enable us to meet the demands of the Army and the nation.

The skills required to master our professions are constantly changing. It is critical to ensure that our workforce has the training it needs to perform current duties and to set the standard within the Department of Defense.

The goal of the ULC is to promote an environment of life-long professional learning. By becoming a PROSPECT course instructor, you can help with promoting continuous learning and ensure that USACE is Building Strong.

(Jeffrey Dziedzic is deputy director of the USACE Learning Center in Huntsville, Ala.)

AROUND THE CORPS



Gus Marino of Galveston District is the Emergency Manager of the Year.

Emergency Manager of Year

Constantine (Gus) Marinos, chief of the Emergency Management Office in Galveston District, was recently named the USACE Emergency Manager of the Year for 2008. The award recognizes his guidance of the district's response during the 2008 hurricane season.

"Gus Marinos was selected from among USACE emergency managers across the nation in a highly competitive process," said Col. David Weston, Galveston District commander. "His outstanding performance and dedication in managing our response and recovery efforts during the 2008 hurricane season were exemplary."

"I'm honored and grateful to receive this award," Marinos said. "Honored because every year there are so many who could easily be recognized. And grateful that the accomplishments of Team Galveston and all those supporting our district are also recognized by this award."

Marinos managed the district's response to Hurricanes Dolly, Gustav and Ike, as well as Tropical Storm Eduard. During Hurricane Dolly Marinos ensured that the response organization was in place, managed funds, and executed the mission.

His involvement in Hurricane Ike included establishing the district's Alternate Emergency Operations Center in Houston, overseeing FEMA missions including debris, temporary power, commodities, ice, water, temporary roofing, assessment of critical infrastructure, and managing the Recovery Field Office in Houston.

As testament to his support of Galveston District and its emergency operations, Marinos has received numerous awards, including the Armed Forces Civilian Service Medal, Achievement Medal for Civilian Service and three Commander's Awards for Civilian Service.

Design-build awards

The Design-Build Institute of America (DBIA) recognized the 2009 National Design-Build Project Awards at their national conference Nov. 5-7.

To be considered, projects must demonstrate successful application of design-build principles, including collaboration in the early stages of the project and the acceptance of single-entity risk. The project must be completed on time, on budget and without litigation.

Winning projects are honored for their advanced and innovative application of total integrated project delivery and unique solutions to project challenges.

USACE received three awards this year:

BCT & Brigade Battalion Headquarters at Fort Carson, Co., received the 2009 Design Excellence Award for Public Sector Building Over \$25 Million. This project houses the 1st Brigade Combat Team of the 4th Infantry Division's administrative and command operations. The facility is home to a brigade headquarters and six battalion headquarters.

St. Bernard Parish Pump Station Rehabilitation, New Orleans, received the Design Excellence Award for Rehabilitation/Renovation/Restoration Project. Hurricane Katrina severely damaged three pump stations in St. Bernard Parish, leaving the parish exposed to flood waters from future hurricanes. The design-build delivery method successfully rehabilitated the three pump stations and provided flood protection before two following hurricanes.

Overhead Coverage System Program: Enhanced Force Protection for U.S. Military and Government Personnel, Iraq, received the Design Excellence Award for Rehabilitation/Renovation/Restoration Project. This project protects more than two million square feet of structures from mortar and rocket attacks and has saved the lives of hundreds of U.S. military and government personnel in Iraq.

Invasive species campaign

Jacksonville District and its federal and state partners unveiled a new public service campaign Dec. 16 to highlight the statewide problem of invasive species.

The unveiling took place at the U.S. Department of Agriculture's Invasive Plant Research Laboratory in Fort Lauderdale, Fla. Invasive species highlighted in the campaign include the Nile monitor, the Burmese python and the

sailfin catfish. The announcement also included a new Web site www.dontletitloose.org, and a toll-free number (1-877-CERP-USA) to call to learn more about invasive species and the campaign.

The Florida Outdoor Advertising Association donated billboard space for the campaign. Billboards were placed along the state's roadways and main highways in December.

New EOD site

Demolition started in November on a seven-story building in Basra once used by the Hussein regime for internment and interrogation. When demolition is complete, a new \$2.6 million explosive ordnance disposal (EOD) facility will be built for the Iraqi Security Forces.

According to Ken Bright, Gulf Region South project engineer, the community is happy about the demolition and new construction because the former facility held bad memories.

"To quote a local Iraqi, 'Many people were taken to the facility for actions that displeased the Hussein regime, and they never came out alive,'" Bright said. "It's a blessing from Allah that the building is being destroyed."

Demolition is expected to be complete by April, with construction of the new compound beginning between June and August. The new EOD facility is a standard design.

"The EOD compound standard design consists of a masonry block perimeter wall with an entry control point, parking area, concrete sidewalk access, an EOD building for about 100 explosive technicians, water storage and distribution, power generation system, and a sewage collection and treatment system," Bright said.

Geophysicist awarded top DoD civilian honor

Dr. Jason McKenna, a senior research geophysicist at the Geotechnical and Structures Laboratory in Vicksburg, Miss., has received the 54th annual Department of Defense (DoD) Distinguished Civilian Service Award.

McKenna was one of six to receive the award this year, and the only Army winner. The award is the highest given to civilian career employees who make significant contributions to DoD.

McKenna was cited for meaningful contributions to the safety and welfare of defense personnel worldwide from August 2005 through March 2009. His research and development of products to detect and defeat clandestine tunneling have ensured security at America's borders and helped protect the interests of U.S. government assets and allies worldwide. He also helped improve sensor/armour efficacy against improvised explosive devices (IED).

McKenna is the technical manager for the first-ever DoD and Department of Homeland Security co-sponsored Joint Capability Technology Demonstration, "Rapid Reaction Tunnel Detection and Defeat." The technology demonstration is now under consideration by the Office of the Secretary of Defense for a 2010 start and has garnered Combatant Command interest.

McKenna also leads a Joint IED Defeat Organization-sponsored team tasked with obtaining, measuring and archiving a comprehensive suite of near-surface properties in



Dr. Jason McKenna, a senior research geophysicist at the Geotechnical Structures Laboratory, received the DoD Distinguished Civilian Award.

Iraq and Afghanistan. This is critical to improving sensors for IED detection, and improving armament against attacks.

(ERDC press release.)

Great Wonders of USACE

Wolf Creek Dam showcases technology and innovation

By Mark Rankin
Nashville District

The Wolf Creek Dam Seepage Rehabilitation Project in Russell County, Ky., demonstrates the complexity, diverse technology, flexibility and innovative culture of U.S. Army Corps of Engineers. The Wolf Creek project, managed by Nashville District, is one of the Corps' most visible high-priority projects.

Since the 1960s and '70s, engineers, geologists and technicians have used both conventional and innovative methods for collecting and assessing key data that measure quality and improvement, as well as guide success.

"Instrumentation is critical to our efforts of monitoring the condition of the dam and foundation, and any impacts from construction of the barrier wall," said Michael Zoccola, chief of the district's Civil Design Branch. "The instrumentation data, along with quality control data obtained during construction, will be used to assess the success of the remediation."

Unique project. Nashville District is three and a half years into the six-year, \$584 million seepage rehabilitation project. The dam is more than 258 feet high and more than a mile long. It was built partially as a concrete hydroelectric dam, and partly as an earth-fill embankment structure.

Wolf Creek Dam impounds Lake Cumberland, the largest manmade reservoir east of the Mississippi River. At capacity, the lake has more than 1,200 miles of shoreline, more than 63,000 acres of surface area, and stores six million acre-feet of water. The lake provides recreation and tourism that are major industries for surrounding counties.

Wolf Creek Dam, designed in the 1940s and in service since 1952, provides flood damage reduction, hydropower, recreation, water supply and water quality to the region. Any compromise to its integrity would threaten hundreds of thousands of people in the area, and could cause an estimated three billion dollars of property damage downstream.

But throughout the years, pressure from the water in the reservoir caused erosion in the soil-filled spaces in the rock underneath the dam, and it developed serious seepage problems. As USACE screened its dams for safety issues, it identified Wolf Creek Dam as one of its highest risk projects, and made it a priority for permanent rehabilitation.

Several repair projects helped stem the flow, but in recent years managers decided that recurring seepage at the dam constitut-



Nashville District Photo

A 50-inch drill bit is just one item of the advanced technology in use at the Wolf Creek Dam Seepage Rehabilitation Project.

ed an emergency. To seal off further seepage, remedial construction began in 2006. The project includes a major grouting program to be followed by building a million-square-foot concrete diaphragm wall.

As part of the monitoring and analysis portion of the project, USACE retained URS Corporation to design, install and operate an automated data acquisition system (ADAS).

Automation. The ADAS monitors the piezometers that measure seepage in the embankment and foundation. System installation began during the summer of 2008.

All instrument readings are collected by a host computer in the dam's powerhouse. A local file transfer protocol (FTP) server provides remote transfer of daily data files to both Nashville District and the URS St. Louis office. In addition, URS hosts a project Web server that displays graphs and instrument readings every hour.

With more than 300 piezometers throughout the dam area, the ADAS has 81 vibrating-wire pressure transducers that are read by Campbell Scientific CR1000 data loggers and 25 AVW206 wireless interface units.

All data is transmitted by radio. URS installed an 800-foot fiber optic cable to carry the radioed data from atop the dam down to the communication room in the dam's powerhouse. URS operates and maintains the ADAS to keep track of seepage levels as dam repair progresses through 2014.

In the late 1960s and early '70s, USACE pumped cement grout into the foundation and earthen embankment, and built a concrete wall through three-quarters of the length of the embankment and into the foundation.

Sensors. Since that time, measuring instruments such as piezometers (a pipe in the ground to measure the water level at a specific depth), inclinometers (an instrument used to determine horizontal displacement at varying depths), and extensometers (a device for measuring small vertical displacements), have been installed in various areas around the dam. They constantly monitor and measure the performance of the dam.

"It's good to have these instruments providing measurements and readings, or else we wouldn't know where we stand," said Jody Stanton, Nashville District's chief geologist. "This information allows us to detect problems, monitor progress, and make the dam safer and stronger than before."

"Every time we drill into the foundation or check instruments, the information we gather improves our understanding, and allows us to collect more information about the improvements to the dam," said Bill Walker, Wolf Creek lead data manager.

Complexity. The enormous and complex Wolf Creek project calls for a new two-foot-thick concrete barrier wall inserted 50 feet upstream from the original wall and

extended through the entire 4,000 feet of the earthen section. It reaches into a more stable section of limestone up to 100 feet beneath the base of the dam.

This excavation is then backfilled with concrete to form overlapping columns to intercept and block seepage through the porous limestone foundation. This extremely difficult process is performed without visual observation, using sophisticated instrumentation and tools to ensure that the 275-foot-deep barrier wall meets specifications.

"Wolf Creek Dam is an extensive and unique structure for collecting historical data," said David Hendrix, project manager. Hendrix added that USACE is setting a standard for the profession, as the combination of the wall's depth and the hardness of the rock are unprecedented.

Dam Safety University. With Wolf Creek Dam, Nashville District is also building the Corps' reputation as a learning organization. The dam was selected to serve as a "learning lab" under the new Dam Safety University Program. Under this program, engineers and geologists from other districts with dam safety issues spend at least four months in hands-on learning at Wolf Creek Dam, Center Hill Dam, or some other USACE dam safety modification project to gain experience and knowledge.

USACE is projecting to train up to 40 dam rehabilitation specialists, creating the experts of the future who will contribute to the success of dam safety projects throughout USACE for years to come.

Nashville District has averted catastrophic failure despite the difficult foundation condition because engineers and geologists have identified the problem and explored alternatives before making critical decisions about repair.

While this work is going on, Lake Cumberland has been maintained at about 680 feet above sea level, which is about 40 feet lower than normal. Zoccola said that the Interim Risk Reduction Measures plan requires maintaining the lowered reservoir until the permanent concrete barrier wall is installed in Critical Area 1 at the juncture of the concrete and earthen sections, and an evaluation of the structure's performance and instrumentation is completed.

USACE anticipates this portion of the wall will be completed in late 2010, while the entire permanent barrier wall is scheduled for completion in December 2012.

"This is a complex project, and every day is a challenge, but we're confident our fix will ensure the dam is safe and reliable for many years to come," Hendrix said.